

CAPILLARY UNDERFILL AND MOLD ENCAPSULATION METHOD AND APPARATUS

5

Abstract of the Disclosure

A method of packaging a die includes attaching the die to a substrate; underfilling the space between the die and the substrate with a first material, and placing a second material in contact with at least a portion of the die and the substrate after underfilling the space between the die and substrate with the first material. A system includes a semiconductor package having a substrate, a die
10 attached to the substrate, an underfill material positioned between the die and the substrate, and a molding material in contact with at least a portion of the substrate and the die. A heat sink is also in thermal contact with the semiconductor package.

"Express Mail" mailing label number: EV 332568958 US

Date of Deposit: September 30, 2003

This paper or fee is being deposited on the date indicated above with the United States Postal Service pursuant to 37 CFR 1.10, and is addressed to the Commissioner for Patents, Mail Stop Patent Application, P.O. Box 1450, Alexandria, VA 22313-1450.